#### **REMARKS**

## Summary of the Response

No claims have been amended with the instant response. Accordingly, claims 11-31 remain pending. Reconsideration of the rejected claims in view of the following remarks is respectfully requested.

#### Summary of the Office Action

In the instant Office Action, the Examiner has rejected claims 11, 14 - 18, 20 - 22 and 24 - 31 over the art of record, allowed claims 12, 13 and 19 and objected to claim 23. By the present remarks, Applicant submits that the rejections have been overcome, and respectfully requests reconsideration of the outstanding Office Action and allowance of the present application.

#### Allowable Subject Matter

Applicant appreciates the indication that claims 12, 13 and 19 are allowed. Additionally, Applicant appreciates the indication that claim 23 would be allowable if rewritten into independent form including all of the limitations of the base claim and any intervening claims. However, Applicant respectfully submits that all of the claims are allowable for the following reasons.

## Traversal of Rejection Under 35 U.S.C. § 102(b)

Applicant traverses the rejection of claims 11, 14, 15, 18, 20, 22, 24, 25, 30 and 31 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 3,367,142 issued to Groves et al. [hereinafter GROVES].

## Independent Claims 11, 22 and 30 over GROVES

Independent claim 11 recites, in pertinent part:

... a hub having a plurality of grooves with an essentially quadrilateral groove cross section;

a shaft having a plurality of grooves with an essentially quadrilateral groove cross section;

at least one rib radially projecting from one of the grooves of the hub or shaft towards one of the grooves of the other of the hub or shaft.

## Additionally, independent claim 22 recites, in pertinent part:

... an outer tube having a plurality of grooves with an essentially quadrilateral groove cross section;

an inner tube having a plurality of grooves with an essentially quadrilateral groove cross section;

at least one rib radially projecting from one of the grooves of the outer tube or inner tube towards one of the grooves of the other of the outer tube or inner tube.

# Further, independent claim 30 recites, in pertinent part:

... a hub having a plurality of grooves with an essentially quadrilateral groove cross section;

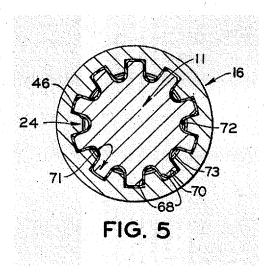
a shaft having a plurality of grooves with an essentially quadrilateral groove cross section;

at least one rib radially projecting from one of the grooves of the hub or shaft towards one of the grooves of the other of the hub or shaft,

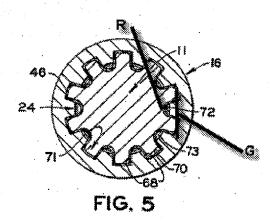
wherein the at least one rib is formed in one piece from a material of the groove from which the at least one rib projects.

To anticipate a claim, each and every element as set forth in the claim must be found, either expressly or inherently described, in a single prior art reference. MPEP § 2131. Applicants submit that GROVES does not disclose all of the features of the claimed invention. Additionally, Applicant submits that, in rejecting the claims, the Examiner has not given the claim term "groove" its customary and ordinary meaning.

GROVES discloses a torque transmitting slip spline assembly having a hub with a plurality of grooves and a shaft with a plurality of grooves, as shown in Figure 5, reproduced below.



In addressing claims 11, 22 and 30, the Examiner asserts that GROVES discloses each of the recited features of the instant invention. However, in rejecting claims 11, 22 and 30, the Examiner relies on an Examiner-modified FIG. 5, which Applicant has reproduced below.



More specifically, the Examiner has defined two adjacent grooves 71 of GROVES as a single groove (G) of the instant invention, and has defined the sleeve spine (72) between the adjacent grooves as the recited rib (R) of the instant invention.

# <u>Claim Term "Groove" Not Given Ordinary and Customary Meaning nor Broadest</u> <u>Reasonable Interpretation in view of the Specification</u>

Applicant submits that the Examiner has not given the claim term "groove" its ordinary and customary meaning and that her interpretation would not be within the broadest reasonable interpretation of "groove" in view of Applicant's specification. Applicant acknowledges that, during patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification (see, e.g., MPEP §2111). It follows from this that any interpretation asserted by the Examiner must be consistent with the specification. As the following passages of the MPEP make clear, the Examiner is not free to disregard the meaning given to a term in the specification simply for the purpose of conforming the applied art to a recited claim term:

During patent examination, the pending claims must be given their broadest reasonable interpretation consistent with the specification.

(MPEP §2111) [emphasis added].

[T]he words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification. *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989).

(MPEP §2111.01) [emphasis added].

The ordinary and customary meaning of a term may be evidenced by a variety of sources, including "the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art." *Phillips v. AWH Corp.*, 415 F.3d at 1314, 75 USPQ2d at 1327.

(MPEP §2111.01) [emphasis added].

If extrinsic reference sources, such as dictionaries, evidence more than one definition for the term, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicant's use of the terms. *Brookhill-Wilk 1*, 334 F. 3d at 1300, 67 USPQ2d at 1137; see also *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250, 48 USPQ2d 1117, 1122 (Fed. Cir. 1998) ("Where there are several common meanings for a claim term, the patent disclosure serves to point away from the improper meanings and toward the proper meanings.")

(MPEP §2111.01) [emphasis added].

Applicant submits that the Examiner has not given the claim term "groove" its ordinary and customary meaning. That is, Applicant submits the Examiner has defined "groove" as two adjacent grooves, as described above. However, Applicant submits that this interpretation of "groove" is inconsistent with the ordinary and customary meaning of the term and is inconsistent with the meaning of groove set forth in the specification. Applicant has defined groove, for example, at least at paragraphs [0027] and [0028] and [0028] and [0028] and [0028].

Moreover, Applicant submits that the Examiner's definition of the term "groove" is also inconsistent with the meaning of "groove" as set forth in GROVES. That is, GROVES defines the element 71 as a groove. However, in rejecting claims 11, 22 and 30, the Examiner has

interpreted two of the grooves 71 of GROVES as a single groove. As such, Applicant submits the Examiner's interpretation of the recited term "groove" is inconsistent both with the instant specification and with GROVES, as well as the ordinary and customary meaning.

Moreover, Applicant submits that, were the term "groove" to be given its ordinary and customary meaning, GROVES cannot be reasonably construed as disclosing each feature of the present invention.

#### No Disclosure of Rib Radially Projecting from One of the Grooves

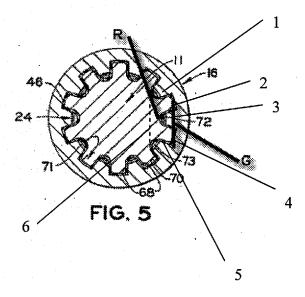
Given the proper construction of "groove," it is apparent that GROVES fails to disclose a rib radially projecting from one of the grooves of the hub or shaft towards one of the grooves of the other of the hub or shaft, as recited at least in the independent claims. Moreover, at best, given the Examiner's interpretation of GROVES, each groove 71 is defined by a radially extending rib 72. Thus, Applicant submits that, as the "ribs" 72 define the grooves 71, the "ribs" do not radially extend from the grooves, as recited in at least the independent claims.

# No Disclosure of Essentially Quadrilateral Groove Cross Section

Applicant submits that GROVES, as interpreted by the Examiner in rejecting claims 11, 22 and 30, does not disclose a hub and a shaft having a plurality of grooves with an essentially quadrilateral groove cross section (claims 11 and 30); and an outer tube and an inner tube having a plurality of grooves with an essentially quadrilateral groove cross section (claim 22). That is, assuming *arguendo* that Examiner's above-described interpretation of GROVES is reasonable (which Applicant does not concede), Applicant submits that with the Examiner's interpretation of GROVES, GROVES does not disclose the recited essentially quadrilateral groove cross

section. More specifically, Applicant submits that the Examiner-designated groove (G) does not have an essentially quadrilateral groove cross section, as recited in claims 11, 22 and 30.

Rather, as shown in the Examiner-modified FIG. 5 reproduced above, the hub (or outer tube) groove has a cross section having at least six sides, and thus cannot reasonably be construed as having an essentially quadrilateral groove cross section. Applicant has added a dashed line and labeled the six sides in the Examiner-modified FIG. 5 below.



Additionally, Applicant submits that the shaft (or inner tube) does not have a plurality of grooves with an essentially quadrilateral groove cross section, as recited in claims 11, 22 and 30. That is, for example, the shaft groove opposite the Examiner-designated hub groove (G) clearly does not have a groove with an essentially quadrilateral groove cross section. Rather, as shown above, the Examiner-designated shaft groove includes at least the labeled sides 1-5 and additionally includes the walls that mate with the sleeve spline 72. As such, Applicant respectfully submits that GROVES cannot reasonably be construed as having an essentially quadrilateral groove cross section.

Thus, Applicant submits that GROVES does not disclose each of features of claims 11, 22 and 30, and does not anticipate the present invention.

Thus, for at least these reasons, Applicant submits that GROVES does not disclose each feature of claims 11, 22 and 30, and does not anticipate the present invention.

#### Dependent Claims 14, 15, 18, 20, 24, 25 and 31 over GROVES

Applicant respectfully submits that claims 14, 15, 18, 20, 24, 25 and 31 depend from allowable independent claims, and are allowable based upon the allowability of the independent claims, and because these claims recite additional subject matter to further define the instant invention.

#### Claims 20 and 25

Additionally, Applicant submits that GROVES does not disclose each of the features of claims 20 and 25. For example, Applicant submits that GROVES does not disclose the essentially quadrilateral groove cross section is an essentially rectangular groove cross section. In addressing this feature, the Examiner merely refers again to FIG. 5. However, for the reasons set forth above, Applicant submits that the Examiner-modified grooves of GROVES cannot be reasonably construed as essentially quadrilateral, and thus, cannot be reasonably construed as essentially rectangular.

Thus, Applicant submits that GROVES does not disclose each of the features of claims 20 and 25, and does not anticipate the present invention.

#### Claim 24

Additionally, Applicant submits that GROVES does not disclose each of the features of claim 24. For example, Applicant submits that GROVES does not disclose the essentially quadrilateral groove cross section is an essentially rectangular groove cross section or the inner tube and the outer tube are both hollow bodies with an approximately uniform profile thickness. More specifically, for the reasons set forth above with regard to claims 20 and 25, Applicant submits that GROVES does not disclose the essentially quadrilateral groove cross section is an essentially rectangular groove cross section.

Additionally, Applicant submits that GROVES does not disclose the inner tube and the outer tube are both hollow bodies with an approximately uniform profile thickness. In addressing these features, the Examiner cites FIG. 5, and identifies the inner tube as element 11 and the outer tube as element 16. However, Applicant submits at least element 11 of GROVES is not a hollow body. Rather, as shown in FIG. 5, the inner shaft 11 is a solid shaft. Additionally, as the inner shaft 11 is not a hollow body, Applicant submits that inner shaft 11 does not have an approximately uniform profile thickness.

Thus, Applicant submits that GROVES does not disclose each of the features of claim 24, and does not anticipate the present invention.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 11, 14, 15, 18, 20, 22, 24, 25, 30 and 31 under 35 U.S.C. § 102(b) and indicate that these claims are allowable.

## Traversal of Rejection Under 35 U.S.C. § 103(a)

## 1. Dependent Claims 16, 17, 21 and 26 Over GROVES

Applicant traverses the rejection of claims 16, 17, 21 and 26 under 35 U.S.C. § 103(a) as being unpatentable over GROVES.

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness. See MPEP §2142. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Applicant submits that the reference does not teach or suggest each of the features of the present invention, and does not render the present invention unpatentable. Additionally, Applicants submit that the Examiner has not set forth a *prima facie* case of obviousness.

<sup>&</sup>lt;sup>1</sup> While the KSR court rejected a rigid application of the teaching, suggestion, or motivation ("TSM") test in an obviousness inquiry, the [Supreme] Court acknowledged the importance of identifying "a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does" in an obviousness determination. Takeda Chemical Industries, Ltd. v. Alphapharm Pty., Ltd., 492 F.3d 1350, 1356-1357 (Fed. Cir. 2007) (quoting KSR International Co. v. Teleflex Inc., 127 S.Ct. 1727, 1731 (2007)).

Applicant respectfully submits that claims 16, 17, 21 and 26 depend from allowable independent claims, and are allowable based upon the allowability of the independent claims, and because these claims recite additional subject matter to further define the instant invention.

#### Claims 16 and 17

Additionally, in addressing claims 16 and 17, the Examiner asserts that GROVES shows all the structural features of the instant invention, but for the at least one rib has a trapezoidal cross section tapering outwards and has a maximum width of 50% or 25% of a width of a corresponding groove from which the rib projects. However, the Examiner asserts, that as the specification discloses that the groove cross section may be rectangular or trapezoidal, there is no criticality with respect to the shape of the rib and groove being claimed. Additionally, the Examiner asserts it "would have been an obvious matter of design choice as determined through routine experimentation and optimization to provide the trapezoidal cross section of Groves et al. with a width of 50% or 25% of a width of a corresponding groove in order to provide the groove profile with the specific desirable dimensions and strength." Applicant disagrees with both of the Examiner's assertions.

As discussed above, the Examiner's interpretation of a groove as being two adjacent grooves is unreasonable and not supported by the cited document of GROVES or within the broadest reasonable interpretation of the term in view of the specification or of its plain and ordinary meaning. As a result, it is apparent that GROVES fails to arguable disclose the recited rib. Because the rib is not disclosed in GROVES, Applicant submits this document cannot provide any instructions for optimizing the rib or describe any obvious structural variants of the rib under 35 U.S.C. § 103(a). Because a rib is not arguably described in the applied art, the

Examiner's arguments regarding criticality are inapposite. Even assuming GROVES is interpreted as disclosing "ribs" defining the grooves, the "ribs" of GROVES do not correspond to the claimed ribs, such that the assertions of lack of criticality do not bolster the Examiner's rejection.

With regard to the Examiner's assertion that there is no criticality with respect to the shape of the shape of the rib and groove being claimed, Applicant initially submits that the Examiner seems to be equating distinct elements of the present invention. That is, the Examiner asserts that, as the specification discloses that the groove cross section may be rectangular or trapezoidal, there is no criticality with respect to the shape of the shape of the <u>rib and groove</u> being claimed.

However, Applicant submits that the groove and the rib are distinct elements of the present invention. Applicant acknowledges that the specification discloses that the groove cross section may be rectangular or trapezoidal. However, Applicant submits that this has no bearing on the shape of the rib, as the Examiner asserts.

As such, Applicant submits that the Examiner has not set forth a *prima facie* case of obviousness, as the Examiner has not properly addressed "the at least one rib has a trapezoidal cross section tapering outwards," as recited in claims 16 and 17. That is, the Examine has not identified where GROVES discloses, teaches or suggests the at least one rib has a trapezoidal cross section tapering outwards. Rather, it appears that the Examiner is improperly relying on Applicant's own disclosure using improper hindsight reasoning. Moreover, Applicant submits that the specification sets forth criticality for the shape of the rib, for example, at least at paragraphs [0013], [0029], and [0035] (of the substitute specification).

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Furthermore, with regard to the Examiner's assertion it that "would have been an obvious matter of design choice as determined through routine experimentation and optimization to provide the trapezoidal cross section of Groves et al. with a width of 50% or 25% of a width of a corresponding groove in order to provide the groove profile with the specific desirable dimensions and strength," Applicant submits that the Examiner has failed to factually support this conclusion with any documentary evidence. MPEP §2144.05 states that, in regard to routine experimentation, only prior art recognized result-effective variables can be optimized for purposes of formulating an obviousness rejection. More specifically:

A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. In re Antonie, 559 F.2d 618, 195 USPQ 6 (CCPA 1977) (The claimed wastewater treatment device had a tank volume to contractor area of 0.12 gal./sq. ft. The prior art did not recognize that treatment capacity is a function of the tank volume to contractor ratio, and therefore the parameter optimized was not recognized in the art to be a result- effective variable.). See also In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (prior art suggested proportional balancing to achieve desired results in the formation of an alloy).

(MPEP §2144.05) [emphasis added]

Applicant respectfully submits that the Examiner has failed to establish that the prior art (i.e., GROVES) recognizes the various features recited in claims 16 and 17 are result-effective variables. As such, the Examiner has improperly rejected the claims via the rationale of optimization through routine experimentation.

Thus, for at least these reasons, Applicant submits that the Examiner has not set forth a prima facie case of obviousness.

#### Claims 21 and 26

Additionally, in addressing claims 21 and 26, the Examiner asserts that GROVES shows all the structural features of the instant invention, but for the essentially quadrilateral groove cross section is an essentially trapezoidal groove cross section. However, the Examiner asserts, that as the specification discloses that the groove cross section may be rectangular or trapezoidal, there is no criticality with respect to the shape of the shape of the rib and groove being claimed.

However, in addressing the recited trapezoidal shape of the groove cross section, the Examiner has not set forth a *prima facie* obviousness rejection. That is, the Examiner has not set forth a reason as to why one of skill in the art would be motivated to modify the cross sectional profile of the Examiner-designated groove of GROVES to a trapezoidal shape. As such, as discussed further below, Applicant submits that the Examiner has not set forth a clear record or a complete action.

Thus, for at least these reasons, Applicant submits GROVES does not teach or suggest each of the features of the present invention, and does not render the present invention unpatentable. Additionally, Applicant submits that the Examiner has not set forth a *prima facie* case of obviousness.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 16, 17, 21 and 26 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

## 2. <u>Dependent Claims 27 – 29 Over Groves in view of Fukukawa</u>

Applicant traverses the rejection of claims 27 – 29 under 35 U.S.C. § 103(a) as being unpatentable over GROVES in view of U.S. Patent Publication 2002/0040835 issued to Fukukawa [hereinafter FUKUKAWA].

In addressing claims 27 – 29, the Examiner states "that [GROVES] disclose the claimed invention except for a method of producing a groove profile comprising conforming a surface of one of the hub and the shaft with a profile mandrel through engagement with one or more profile rollers; and profiling the surface of one of the hub and the shaft to form the at least one rib." However, the Examiner asserts that FUKUKAWA teaches these recited features and that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the profile groove of [GROVES] with the step method of [FUKUKAWA] in order to produce a groove profile." Applicant disagrees that one of ordinary skill in the art would be motivated to combine the applied references in the manner asserted.

Claims 27 and 29 recite, in pertinent part:

... conforming a surface of one of the hub and the shaft with a profile mandrel through engagement with one or more profile rollers; and profiling the surface of one of the hub and the shaft to form the at least one rib.

# Claim 28 recites, in pertinent part:

... periodic impacting engaging of the one or more profile rollers with a surface of one of the hub and the shaft.

Applicant notes that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. W.L. Gore & Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied,

469 U.S. 851 (1984). Further, Applicant notes that if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. Additionally, Applicant notes that if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious. *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959).

Applicant submits that modifying GROVES with the process of FUKUKAWA in the manner asserted by the Examiner would change the principle of operation of GROVES and would render GROVES unsatisfactory for its intended purpose.

FUKUKAWA is directed to a method and apparatus for manufacturing a cylindrical member having splines, and more specifically, is directed to manufacturing a front cover of a torque converter. As disclosed in FUKUKAWA, the process begins with a disc-shaped blank held between a tailstock and a mandrel, wherein the outer edges of the disc-shaped blank are bent downwards, thus forming a front cover of the torque converter. Inner splines are then formed in the outer edges which have been bent downwards using a flow forming process.

Thus, Applicant submits that the FUKUKAWA device requires the disc-shaped blank to be held between a tailstock and a mandrel. However, Applicant submits that the GROVES device cannot be formed in the FUKUKAWA apparatus. That is, Applicant submits that the GROVES device does not begin with a disc-shaped blank that could be held in the manner taught by FUKUKAWA.

Rather, GROVES discloses that a forged blank of steel is machined to create the splined shaft 11. As shown in Figures 2 and 3 of GROVES, the splined shaft is a solid piece of steel that

could not be accommodated in the FUKUKAWA device, which is designed to hold a disc-shaped blank. Additionally, the sleeve 16 of GROVES, manufacturing through a hobbing (or die cutting) process, could not be accommodated in the FUKUKAWA device, which is designed to hold a disc-shaped blank.

Thus, Applicant respectfully submits that GROVES teaches away from being modified in the manner asserted by the Examiner, in that the modification of GROVES in the manner asserted by the Examiner (i.e., incorporating the manufacturing process of FUKUKAWA) would change the principle of operation of GROVES manufacturing process. Additionally, Applicant submits that the proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose. That is, the GROVES device would need to be modified in order to be accommodated in the manufacturing device of FUKUKAWA, such that the modification would change the principle of operation of the GROVES manufacturing process. Further, modifying GROVES to be accommodated by FUKUKAWA, would render GROVES unsatisfactory for its intended purpose. As such, Applicant submits that it would not have been obvious to one of ordinary skill in the art to modify GROVES with the process of FUKUKAWA in the manner asserted to arrive at the claimed invention. Thus, Applicant respectfully submits there is no suggestion or motivation to make the proposed modification, and the Examiner has not set forth a *prima facie* case of obviousness.

Thus, for at least these reasons, Applicant submits that GROVES in view of FUKUKAWA does not render claims 27 – 29 unpatentable.

Moreover, Applicant respectfully submits that claims 27 - 29 are allowable for the reason that each of these claims depends from an allowable independent claim, and because each of these claims recite additional subject matter to further define the instant invention.

Accordingly, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 27 – 29 under 35 U.S.C. § 103(a) and indicate that these claims are allowable.

#### Complete Action Not Provided

Applicant respectfully submits that the Examiner did not provide a complete action, and as such, Applicant submits that the next action should not be a final action. As set forth above, Applicant submits that with regard to claims 16, 17, 21 and 26, the Examiner has not set forth a proper prima facie case of obviousness.

More specifically, with regard to claims 16 and 17, Applicant submits the Examiner did not establish that the prior art recognizes the various features recited in claims 16 and 17 are result-effective variables. Additionally, with regard to claims 21 and 26, Applicant submits the Examiner did not set forth a reason as to why one of skill in the art would be motivated to modify the cross sectional profile of the Examiner-designated groove of GROVES to a trapezoidal shape. Thus, Applicant submits that a clear record was not provided and a clear issue was not developed between Applicant and the Examiner.

More specifically, MPEP §706 states:

Before final rejection is in order a clear issue should be developed between the examiner and applicant. To bring the prosecution to as speedy conclusion as possible and at the same time to deal justly by both the applicant and the public, the invention as disclosed and claimed should be thoroughly searched in the first action and the references fully applied; and in reply to this action the applicant should amend with a view to avoiding all the grounds of rejection and objection.

Additionally, MPEP 706.07(a) notes:

Under present practice, second or any subsequent actions on the merits shall be final, except where the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17(p). ...

Furthermore, a second or any subsequent action on the merits in any application ... will not be made final if it includes a rejection, on newly cited art, other than information submitted in an information disclosure statement filed under 37 CFR 1.97(c) with the fee set forth in 37 CFR 1.17 (p), of any claim not amended by applicant or patent owner in spite of the fact that other claims may have been amended to require newly cited art.

Accordingly, Applicant respectfully requests that the Examiner address the lack of establishment that the prior art recognizes the various features recited in claims 16 and 17 as result-effective variables and set forth a reason as to why one of skill in the art would be motivated to modify the cross sectional profile of the Examiner-designated groove of GROVES to a trapezoidal shape, such that a clear issue is developed between the Examiner and Applicant. Moreover, Applicant submits that the next action, which should clarify the record, cannot be a final action.

#### **CONCLUSION**

In view of the foregoing, it is submitted that none of the references of record, either taken alone or in any proper combination thereof, anticipate or render obvious the Applicant's invention, as recited in claims 11 - 31. The applied references of record have been discussed and distinguished, while significant claimed features of the present invention have been pointed out.

Accordingly, reconsideration of the outstanding Office Action and allowance of the present application and all of the claims therein are respectfully requested and now believed to be appropriate.

Should there be any questions, the Examiner is invited to contact the undersigned at the below-listed telephone number.

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